

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application.

Claims 1-10 (cancelled).

11. (currently amended) A method of screening for ~~a modulator of neurodegenerative diseases~~
a compound that decreases neurodegenerative diseases, wherein the compound is a
modulator of one or more, or related diseases or disorders of one or more substances
selected from the group consisting of:

- (i) a gene coding for HIF3a,
- (ii) a transcription product of a gene coding for HIF3a,
- (iii) a translation product of a gene coding for HIF3a, and
- (iv) a fragment, or derivative, or variant of (i) to (iii),

said method comprising:

- (a) administering a test compound to ~~a test animal~~ a genetically altered *Drosophila melanogaster* fly which is predisposed to developing or has already developed symptoms of a neurodegenerative disease ~~or related diseases or disorders in respect of the substances recited in (i) to (iv);~~
- (b) measuring the activity and/or level of one or more substances recited in (i) to (iv);
- (c) measuring the activity and/or level of one or more substances recited in (i) to (iv) in a matched control animal which is predisposed to developing or has already developed symptoms of a neurodegenerative disease ~~or related diseases or disorders in respect~~

~~to the substances recited in (i) to (iv)~~ and to which animal no such test compound has been administered;

- (d) comparing the activity and/or level of the substance in the animals of step (b) and (c), wherein an alteration in the activity and/or level of substances in the test animal indicates that the test compound is a modulator of said neurodegenerative diseases or disorders that decreases said neurodegenerative diseases or disorders.

12. (original) The method according to claim 11 wherein said test animal and/or said control animal is a genetically altered non-human animal which expresses the gene coding for HIF3a, or a fragment, or a derivative, or a variant thereof, under the control of a transcriptional control element which is not the native HIF3a gene transcriptional control element.

Claims 13 -24 (cancelled).

25. (previously presented) The method of claim 11, wherein said neurodegenerative disease is Alzheimer's disease.
26. (previously presented) The method of claim 11, wherein said screening is for a modulator of protein molecules of SEQ ID NO. 2, SEQ ID NO. 3, SEQ ID NO. 4, or SEQ ID NO. 5, said protein molecules being translation products of the gene coding for HIF3a, or fragments, or

derivatives, or variants thereof, wherein said modulator is a reagent or compound for preventing, or treating, or ameliorating a neurodegenerative disease.

Claims 27 -28 (cancelled).